

# ZENBAT KUTSATZEN DU *LIKE* ♥ BATEK?

#euskarabildua  
TEKNOLOGIA - KOMUNIKAZIOA

POR QUÉ SILLICON VALLEY NO NOS  
SALVARÁ DEL CAMBIO CLIMÁTICO

**Spideralex**  
Donestech



# EcoBlanqueo - Greenwashing



# IMPACTO ECOLÓGICO DE LAS TRIC

JAN  
2021

## DIGITAL AROUND THE WORLD

ESSENTIAL HEADLINES FOR MOBILE, INTERNET, AND SOCIAL MEDIA USE

INTERNET USER NUMBERS NO LONGER INCLUDE DATA SOURCED FROM SOCIAL MEDIA PLATFORMS, SO VALUES ARE **NOT COMPARABLE** WITH PREVIOUS REPORTS

TOTAL  
POPULATION



**7.83**  
BILLION

URBANISATION:  
**56.4%**

UNIQUE MOBILE  
PHONE USERS



**5.22**  
BILLION

vs. POPULATION:  
**66.6%**

INTERNET  
USERS\*



**4.66**  
BILLION

vs. POPULATION:  
**59.5%**

ACTIVE SOCIAL  
MEDIA USERS\*



**4.20**  
BILLION

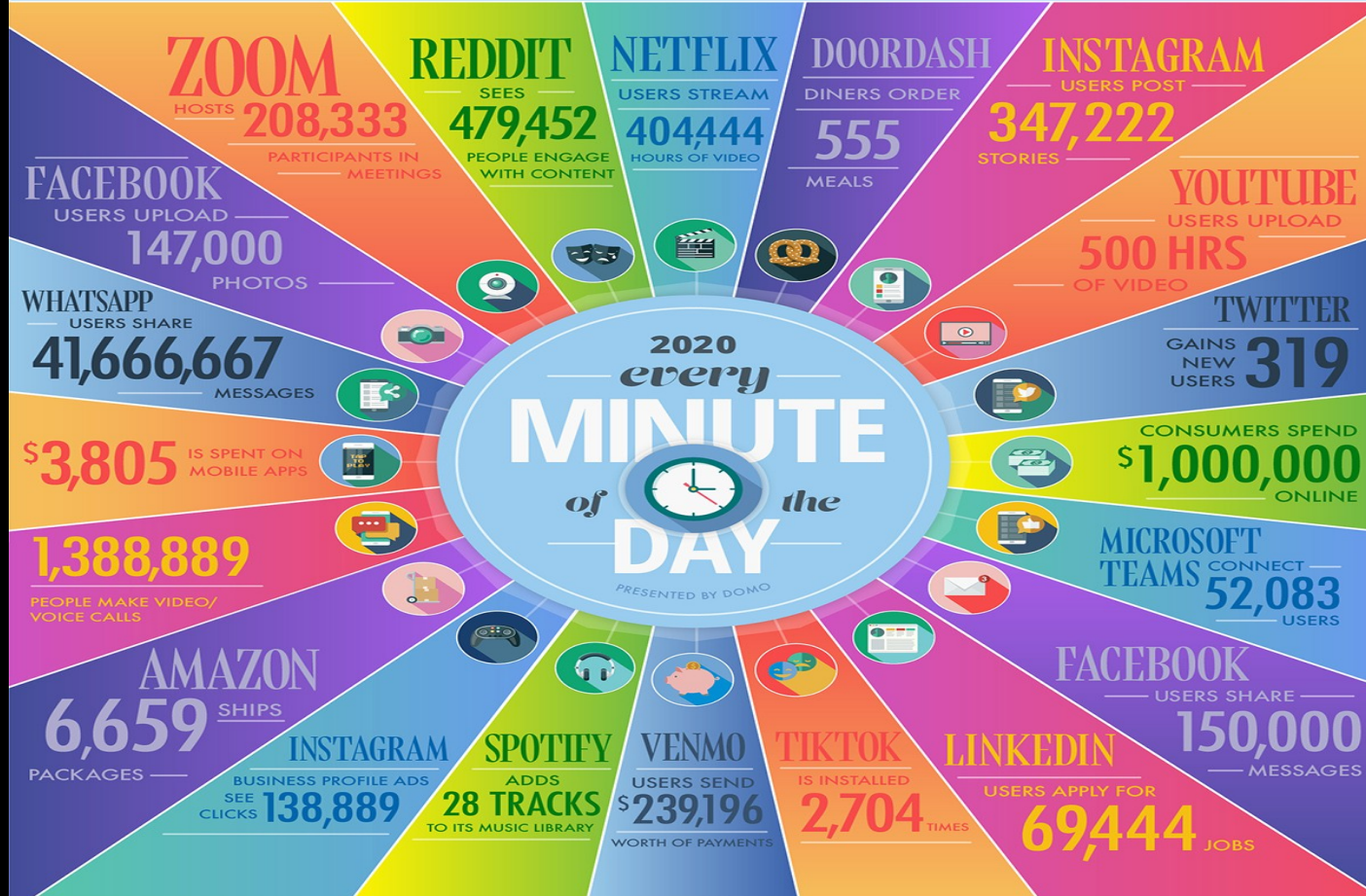
vs. POPULATION:  
**53.6%**



# DATA NEVER SLEEPS 8.0

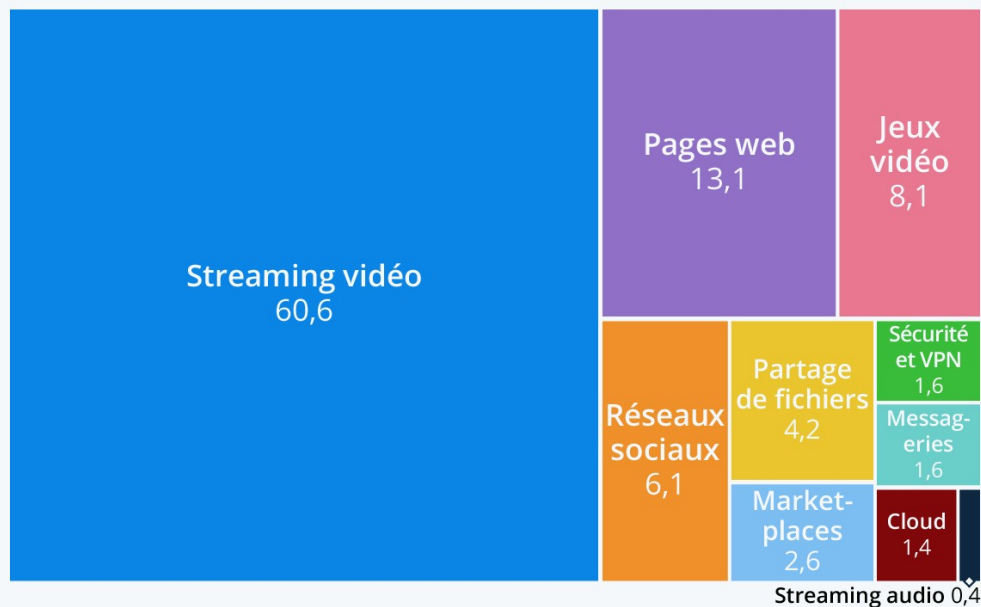
How much data is generated *every minute*?

In 2020, the world changed fundamentally—and so did the data that makes the world go round. As COVID-19 swept the globe, nearly every aspect of life—from work to working out—moved online, and people depended more and more on apps and the Internet to socialize, educate and entertain ourselves. Before quarantine, just 15% of Americans worked from home. Now over half do. And that's not the only big shift. In our 8th edition of Data Never Sleeps, we bring you the latest stats on how much data is being created in every digital minute—a trend that shows no sign of stopping.



# Le streaming vidéo représente 61 % du trafic Internet

Répartition du trafic Internet descendant mondial en 2019 (%)

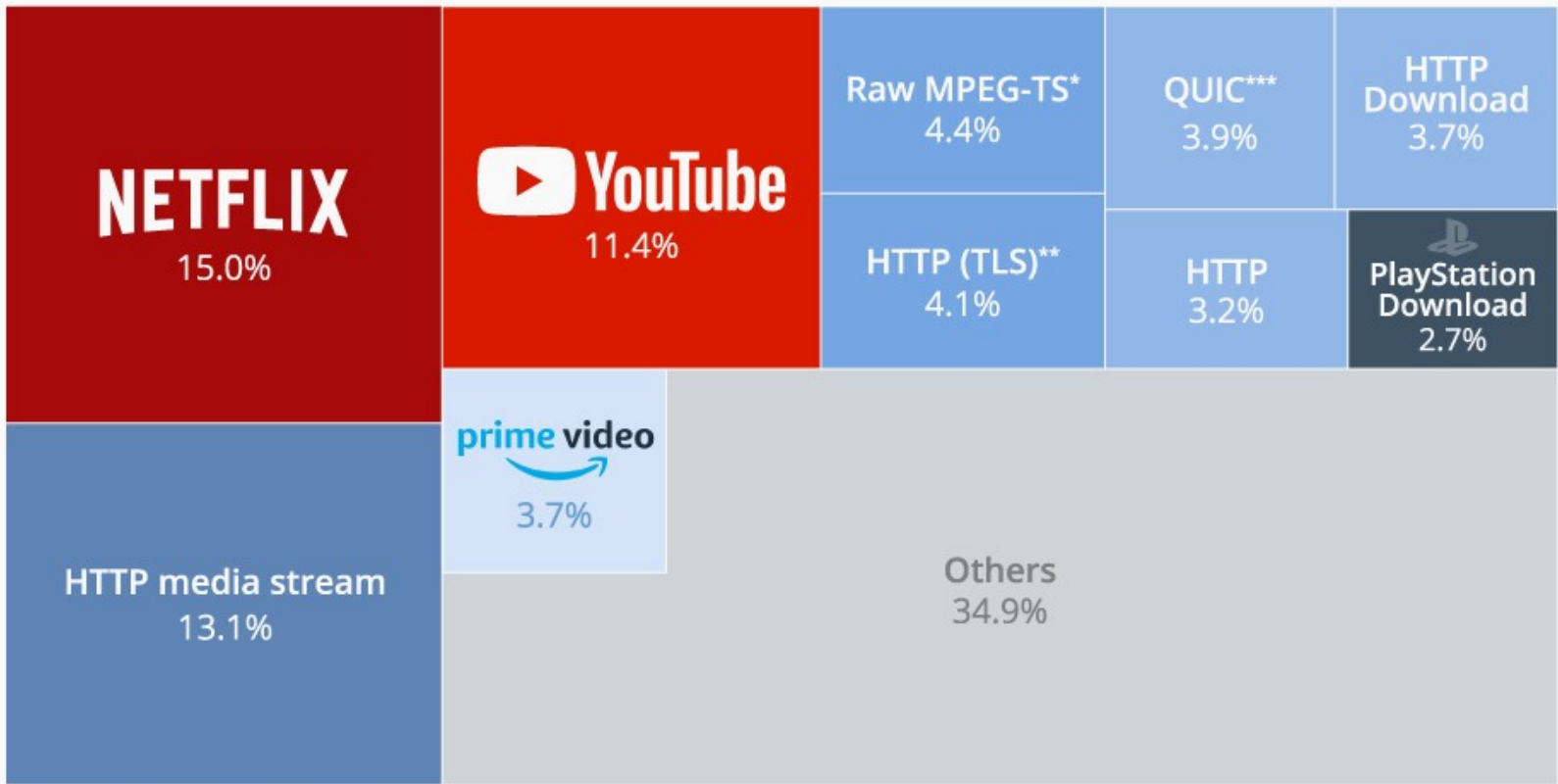


Source : Sandvine | The Global Internet Phenomena Report



# Netflix is Responsible for 15% of Global Internet Traffic

Distribution of worldwide downstream traffic, by web application



\* Digital container format for the transmission and storage of audio, video, and data.

\*\* Security protocol

\*\*\* Network protocol designed to speed up online web applications



**Terminaux 20 %**

(utilisation)

**Ordinateurs 17 %**

(production)

**Data centers 19 %**

(utilisation)

**TVs 11 %**

(production)

**Réseaux 16 %**

(utilisation)

**Smartphones 11 %**

(production)

**Autres 6 %**

(production)

**Distribution de la consommation d'énergie finale  
du numérique par poste pour la production (45 %)  
et l'utilisation (55 %) en 2017**

Source : Lean ICT, The Shift Project 2018

# IMPACTO ECOLÓGICO DE LAS TRIC

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## OVERVIEW OF THE SMART HOME DEVICE MARKET

VALUE OF THE GLOBAL MARKET FOR SMART HOME DEVICES, WITH VALUE BY DEVICE SUB-CATEGORY (IN U.S. DOLLARS)

⚠ REVISIONS TO HISTORICAL FIGURES MEAN VALUES ARE NOT COMPARABLE WITH THOSE PUBLISHED IN PREVIOUS REPORTS

NUMBER OF HOMES WITH  
SMART HOME DEVICES



**221.7**  
MILLION

TOTAL ANNUAL VALUE OF  
SMART HOME DEVICES MARKET



**\$77.39**  
BILLION

VALUE OF SMART HOME CONTROL  
& CONNECTIVITY DEVICE MARKET\*



**\$14.98**  
BILLION

VALUE OF SMART HOME  
APPLIANCES MARKET



**\$28.51**  
BILLION

VALUE OF SMART HOME  
SECURITY DEVICE MARKET



**\$11.92**  
BILLION

VALUE OF SMART HOME  
ENTERTAINMENT DEVICE MARKET



**\$9.24**  
BILLION

VALUE OF SMART HOME  
COMFORT & LIGHTING MARKET



**\$6.62**  
BILLION

VALUE OF SMART HOME  
ENERGY MANAGEMENT MARKET



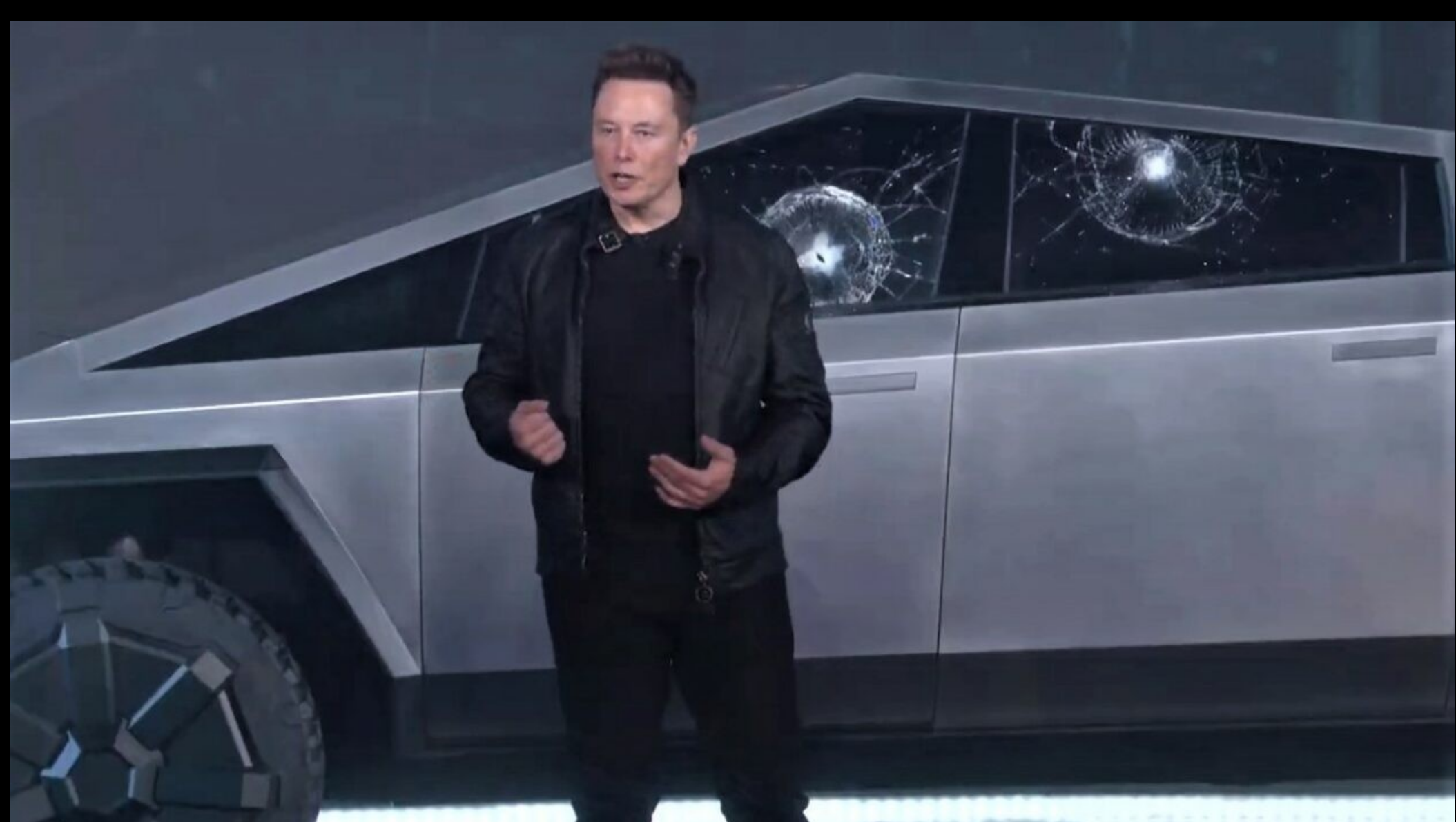
**\$6.12**  
BILLION

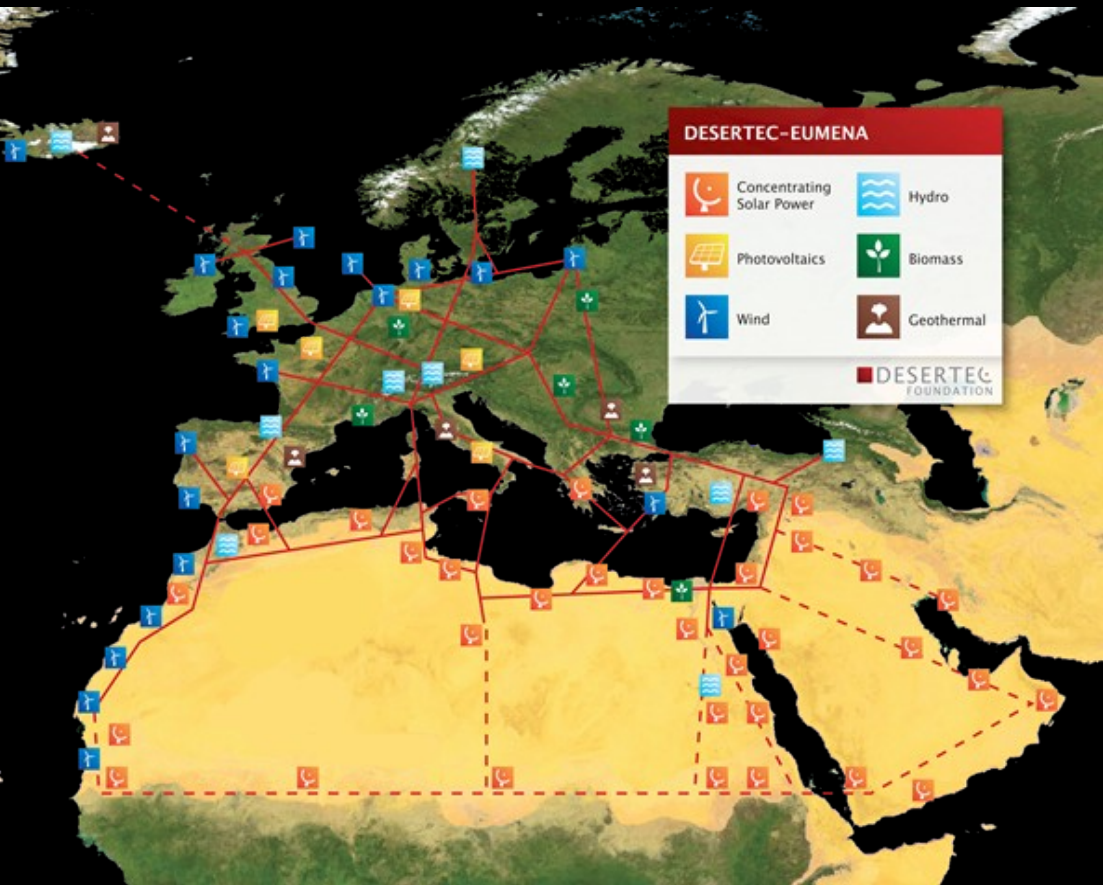




Benjamin Gaulon - Comresse



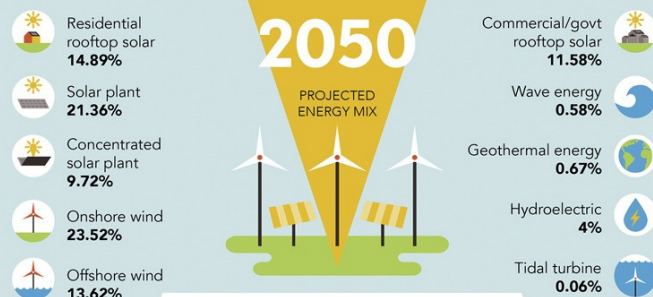




DESERTEC

# 100% IN 139 COUNTRIES

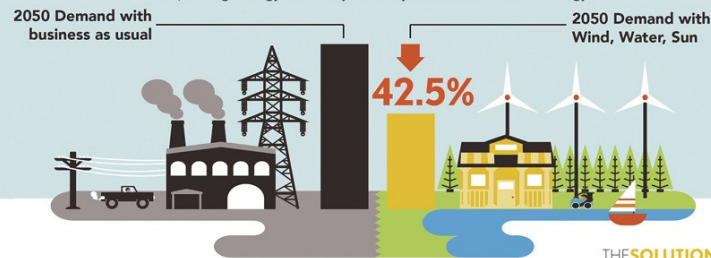
Transition to 100% wind, water, and solar (WWS) for all purposes (electricity, transportation, heating/cooling, industry)



**JOBS CREATED 52 MILLION**

**JOBS LOST 27.7 MILLION**

Using WWS electricity for everything, instead of burning fuel, and improving energy efficiency means you need much less energy.



WIND, WATER, SUN



FOXCONN

# LOS LIMITES



# EFECTO REBOTE



# OBSOLESCENCIA PROGRAMADA



# ECONOMÍA CIRCULAR

## ELEMENTS OF A SMARTPHONE

ELEMENTS COLOUR KEY: ● ALKALI METAL ● ALKALINE EARTH METAL ● TRANSITION METAL ● GROUP 13 ● GROUP 14 ● GROUP 15 ● GROUP 16 ● HALOGEN ● LANTHANIDE

### SCREEN



Indium tin oxide is a mixture of indium oxide and tin oxide, used in a transparent film in the screen that conducts electricity. This allows the screen to function as a touch screen.



The glass used on the majority of smartphones is an aluminosilicate glass, composed of a mix of alumina (Al<sub>2</sub>O<sub>3</sub>) and silica (SiO<sub>2</sub>). This glass also contains potassium ions, which help to strengthen it.



A variety of Rare Earth Element compounds are used in small quantities to produce the colours in the smartphone's screen. Some compounds are also used to reduce UV light penetration into the phone.



### BATTERY



The majority of phones use lithium ion batteries, which are composed of lithium cobalt oxide as a positive electrode and graphite (carbon) as the negative electrode. Some batteries use other metals, such as manganese, in place of cobalt. The battery's casing is made of aluminium.

Magnesium compounds are alloyed to make some phone cases, whilst many are made of plastics. Plastics will also include flame retardant compounds, some of which contain bromine, whilst nickel can be included to reduce electromagnetic interference.

### ELECTRONICS



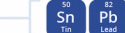
Copper is used for wiring in the phone, whilst copper, gold and silver are the major metals from which microelectrical components are fashioned. Tantalum is the major component of micro-capacitors.



Nickel is used in the microphone as well as for other electrical connections. Alloys including the elements praseodymium, gadolinium and neodymium are used in the magnets in the speaker and microphone. Neodymium, terbium and dysprosium are used in the vibration unit.



Pure silicon is used to manufacture the chip in the phone. It is oxidised to produce non-conducting regions, then other elements are added in order to allow the chip to conduct electricity.



Tin & lead are used to solder electronics in the phone. Newer lead-free solders use a mix of tin, copper and silver.

### CASING



## RECYCLING RATES OF SMARTPHONE METALS

COLOUR KEY: ● <1% RECYCLE RATE ● 1-10% RECYCLE RATE ● 10-25% RECYCLE RATE ● 25-50% RECYCLE RATE ● >50% RECYCLE RATE ● NON-METAL (OR RECYCLE RATE UNKNOWN)

### SCREEN



**TOUCH: INDIUM TIN OXIDE**  
Used in a transparent film over the phone's screen that conducts electricity. This allows the screen to function as a touch screen. This is the major use of indium.



**GLASS: ALUMINA & SILICA**  
On most phones the glass is aluminosilicate glass, a mix of aluminium oxide & silicon dioxide. It also contains potassium ions which help strengthen it.



**COLOURS: RARE EARTH METALS**  
A variety of rare earth metal-containing compounds are used to help to produce the colours in a smartphone's screen. Some of these compounds are also used to help reduce light penetration into the phone. Many of the rare earths occur commonly in the Earth's crust, but often at levels too low to be economically extracted.



### BATTERY



Most phones use lithium ion batteries, composed of lithium cobalt oxide as a positive electrode and graphite (carbon) as the negative electrode. Sometimes other metals, such as manganese, are used in place of cobalt. The battery casing is often made of aluminium.

Magnesium alloy is used to make some phone cases, whilst many others are made of plastics, which are carbon-based. Plastics will also include flame retardant compounds, some of which contain bromine, whilst nickel can be included to reduce electromagnetic interference.

### ELECTRONICS



**WIRING & MICROELECTRONICS**  
Copper is used for wiring, and for micro-electrical components along with gold and silver. Tantalum is the major component in micro-capacitors.



**MICROPHONES & VIBRATIONS**  
Nickel is used in the microphone and for electrical connections. Rare earth element alloys are used in magnets in the speaker and microphone, and the vibration unit.



**THE SILICON CHIP**  
Pure silicon is used to manufacture the chip, which is then oxidised to produce non-conducting regions. Other elements are added to allow the chip to conduct electricity.



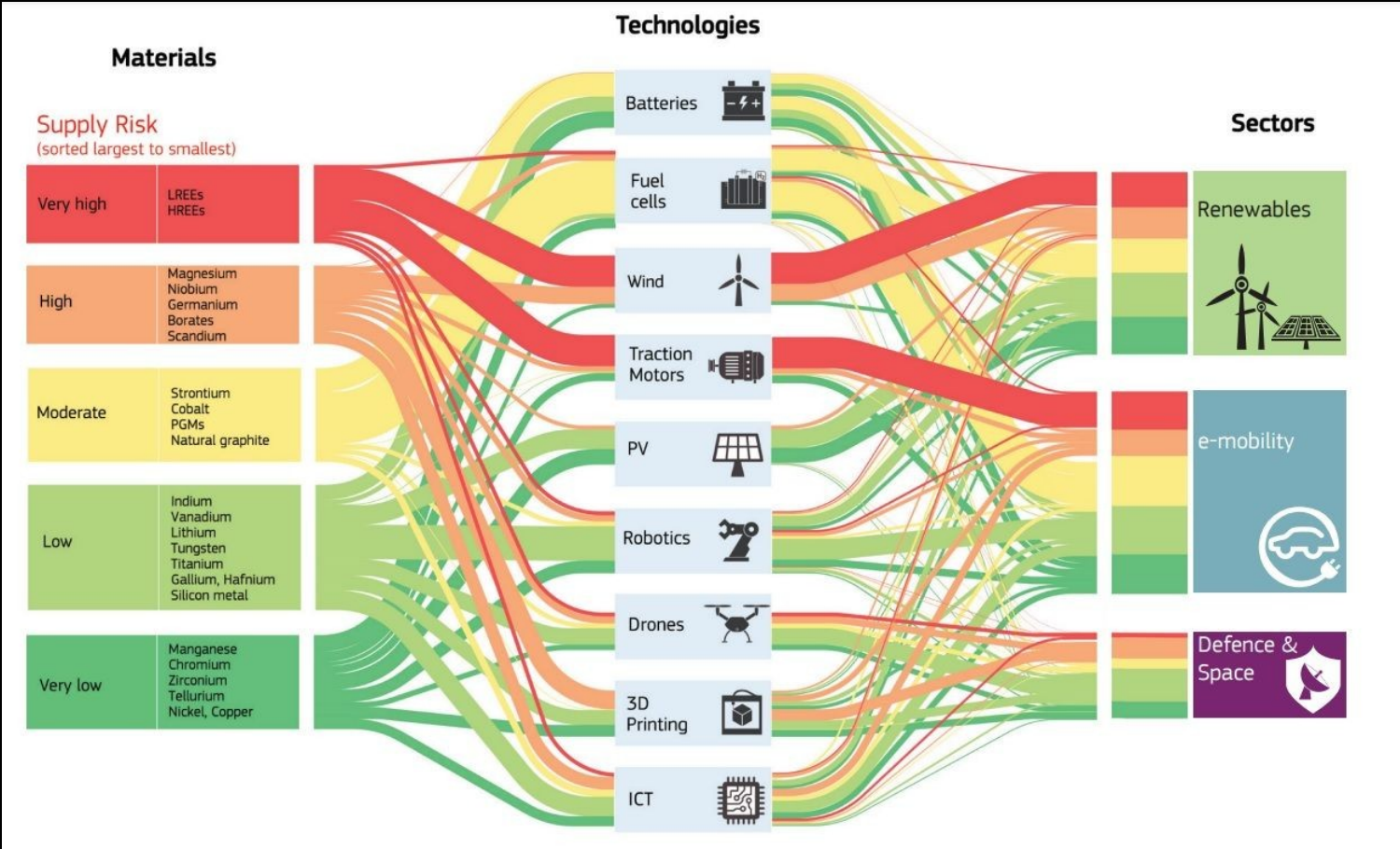
**CONNECTING ELECTRONICS**  
Tin & lead were used in older solders; newer, lead-free solders use a mix of tin, copper & silver.

### CASING





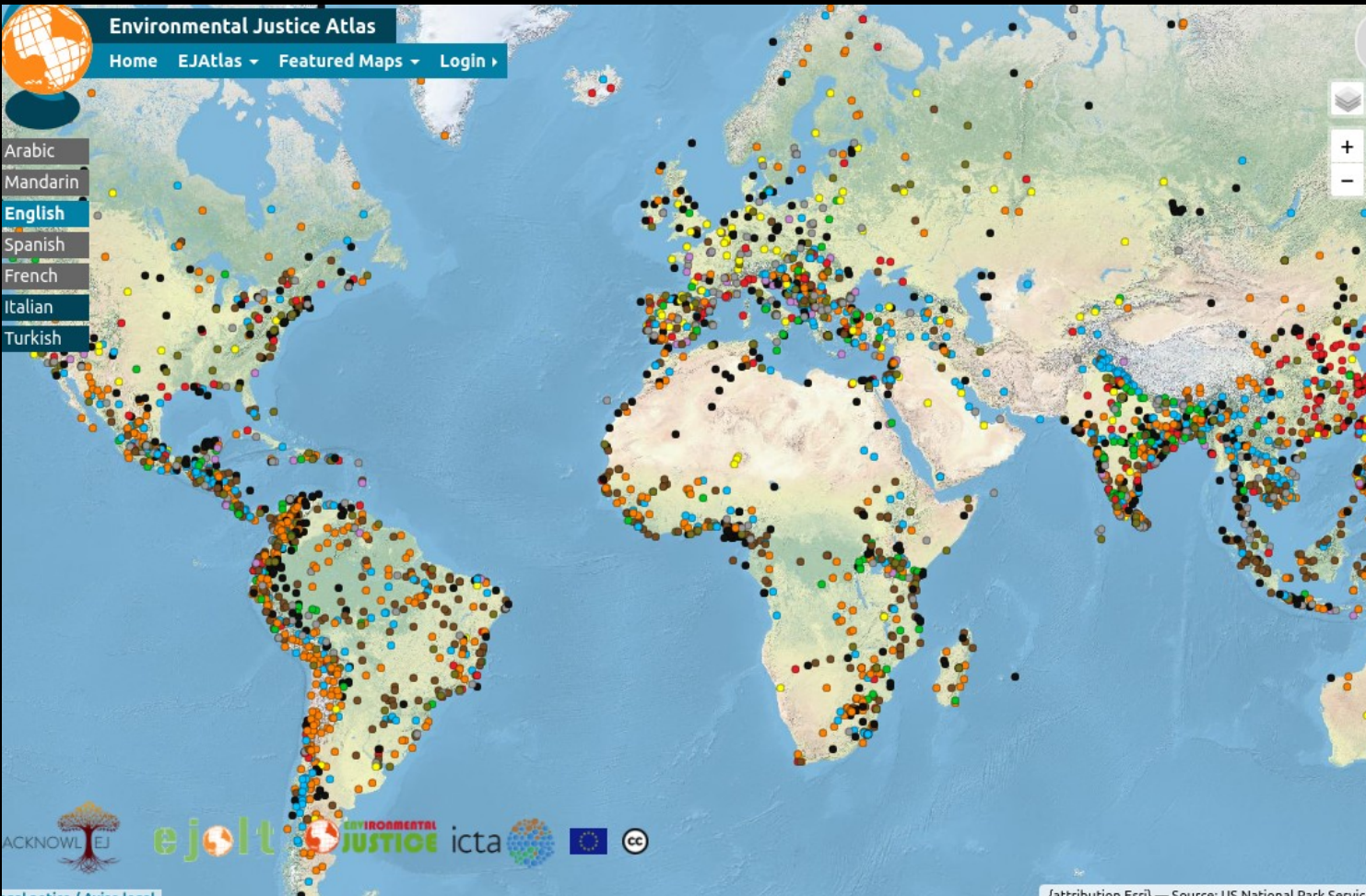
# PEAK EVERYTHING



# LOS LIMITES



# LOS LIMITES



## EJAtlas - Global Atlas of Environmental Justice



3524 cases have been reported so far

The EJAtlas is a work in progress. Newly documented cases and information are continuously added to the platform. However, many are still undocumented and new ones arise. Please note that the absence of data does not indicate the absence of conflict. You can help us improve the coverage: [register here](#).

- > Legend
- > Filter
- > Browse Maps
- ▼ Newly Published Featured Maps



### Conflictos y daños en los proyectos de Pan American Silver en América Latina / Conflict and Harm at Pan American Silver's Projects in Latin America

Este mapa revela los daños provocados por ocho proyectos mineros de la empresa Pan American Silver, desde México hasta Argentina / This map illustrates harms associated with eight mining projects, from Mexico to Argentina owned by Pan American Silver



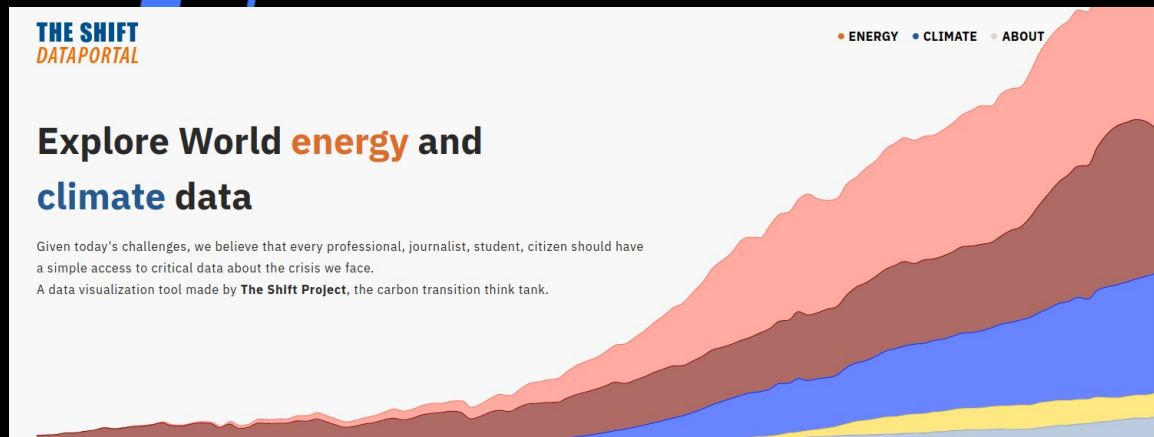
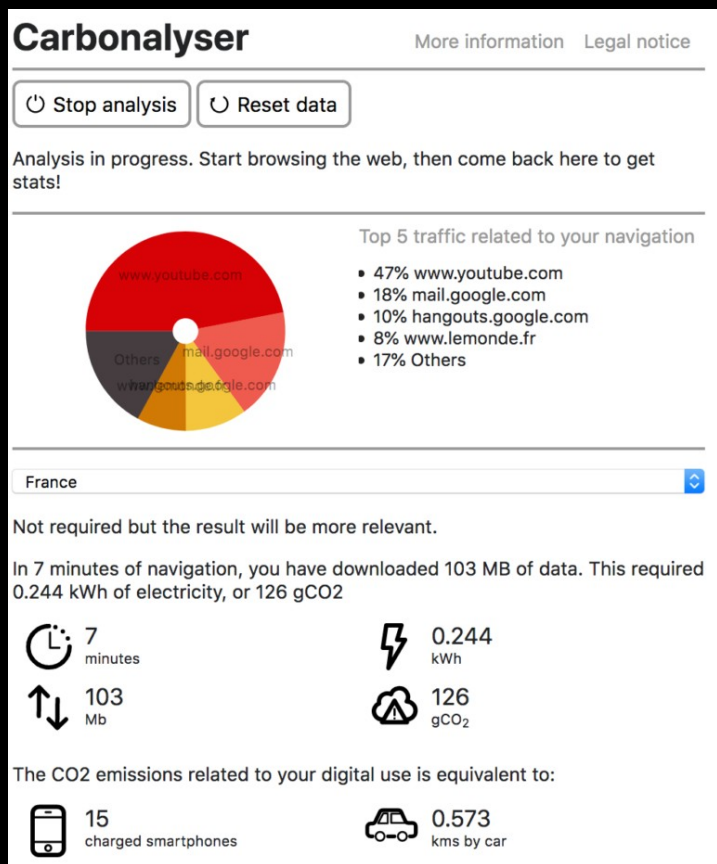
### Map of Airport-Related Injustice and Resistance

This online interactive map brings together case studies documenting a diversity of injustice related to airport projects across

[attribution: Ecol] — Source: US National Park Service

# POSIBLES RESPUESTAS

# Investigación, datos y tomar conciencia



# Right to repair / Stop Programmed Obsolescence

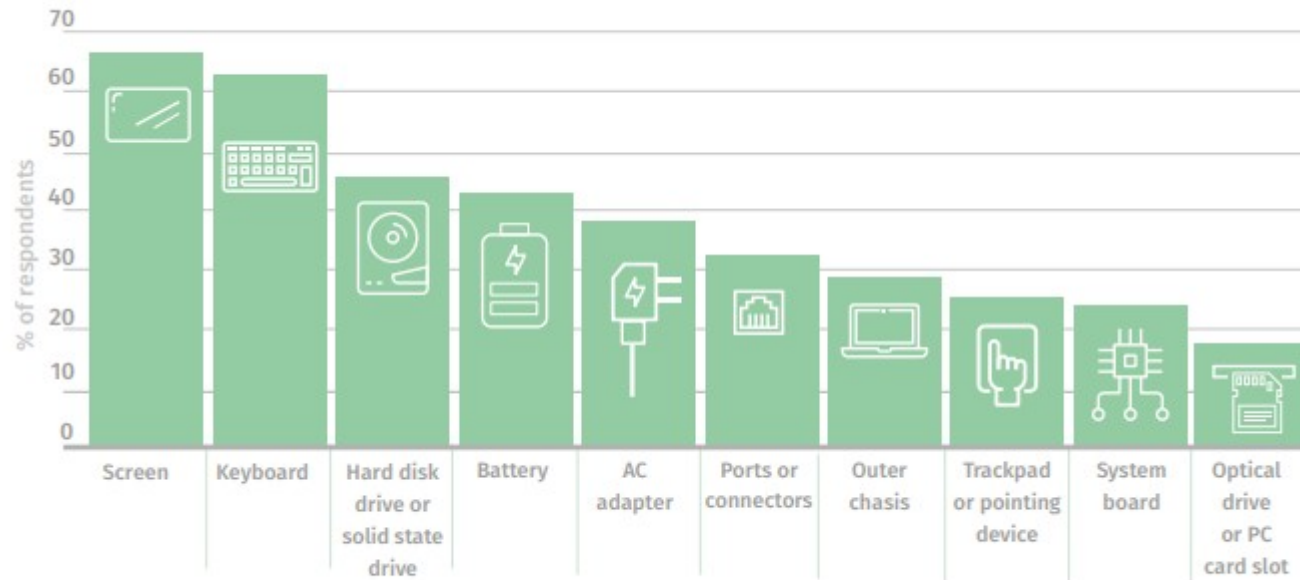


Figure 3 Typical laptop component failures<sup>17</sup>



# Reaprovechar energía

## Why Blockheating?

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### Reuse of energy

In the background of the digital revolution, hard work is being done to maintain capacity and infrastructure. The heat generated by the server capacity and infrastructure is almost always dissipated to the outside air.

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### Decentralization of servers

Typically, companies place servers together. Although economies of scale are possible here, this also creates additional risks. By using decentralized data centers, the risks can be reduced and the network is relieved.

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### Efficient cooling

We use the heat released from a data center to heat greenhouses and buildings. This results in direct savings for both the data center and the user of the heat. Heating can be done via both water and air.



# Solar Protocol

A naturally intelligent network.

This website is hosted across a network of solar powered servers and is sent to you from wherever there is the most sunshine.

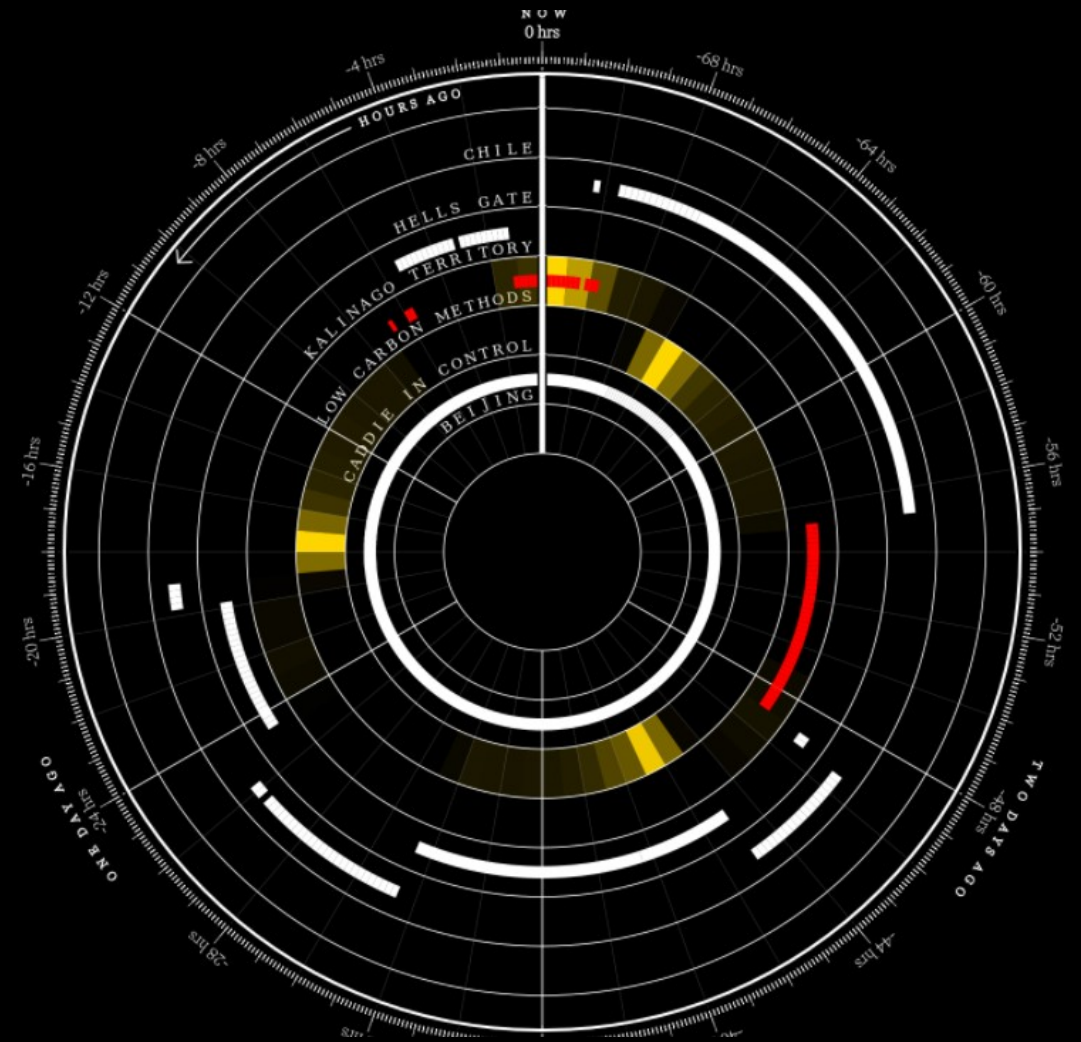
Server Battery:   
Site Render Status: High res mode  
Last update: 01:50 AM in Australia Melbourne

## ACTIVE SERVER

Name: Caddie in Control  
Location: Coal City



## SERVER STEWARD





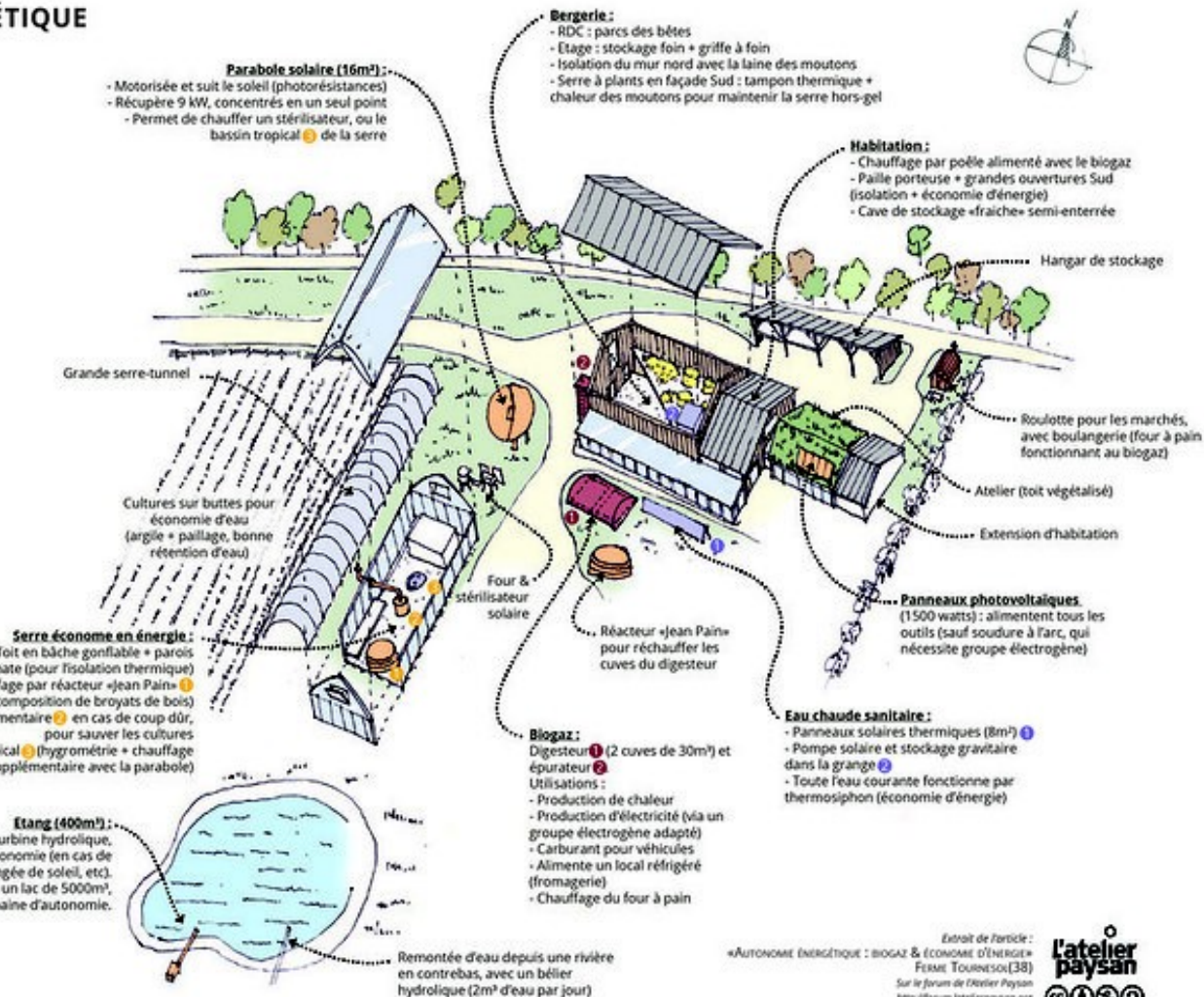
*Chico et Roberta ~ La labomedia – Proyecto Bidon*

# AUTONOMIE ÉNERGÉTIQUE COMPLÈTE

## PRÉSENTATION :

«Voici l'exemple de la ferme diversifiée (élevage de brebis, maraîchage, paysans-boulangers) de Jean-Philippe et Sophie, totalement autonome en énergie. Sans aucun raccordement au réseau, c'est leur installation de biogaz (adaptée à l'échelle de la ferme) qui constitue le cœur énergétique du lieu. Elle leur apporte une production conséquente autant de chaleur que d'électricité, en rechargeant le digesteur peu de fois dans l'année.

De nombreux aménagements viennent renforcer l'installation en biogaz, aussi bien sur la production que sur l'économie d'énergie. À partir d'une installation à un coût minimum, c'est au fil d'une attitude empirique que Jean-Philippe a continuellement modifié et amélioré ces différents dispositifs, au risque d'en laisser certains de côté s'ils ne s'avéraient plus pertinents. De la serre économe en énergie pour faire une maraîchage en toute saison à 800m d'altitude, en passant par l'agencement avisé des espaces sur le plan thermique, voici un panel des différents dispositifs qui participent à l'autonomie de cette ferme.»







ATS-UNIS : UNE MYSTÉRIEUSE VAGUE DE VAND

birdgraveyard  
113.6 k abonnés

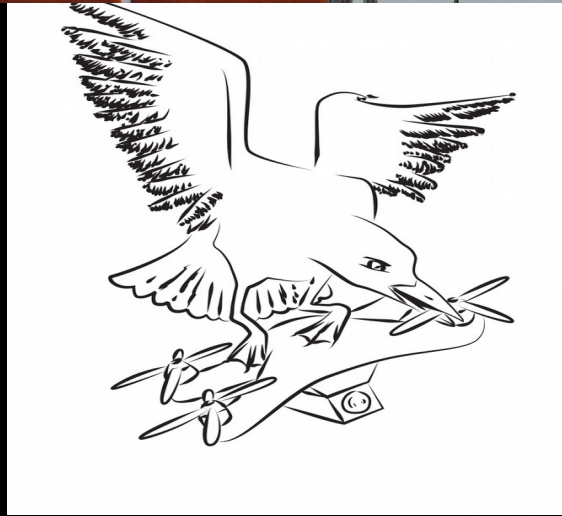
[Voir le profil](#)



ATS-UNIS : UNE MYSTÉRIEUSE VAGUE DE VAND



[Afficher le profil sur Instagram](#)



**ON APPELLE  
ÇA L'INNO-  
VATION,  
MAIS  
NOUS  
PRÉFÉ-  
RONS  
PARLER  
DE L'ACCU-  
MULATION  
DES RUINES**

